APPENDIX 1

Brood Development Time

To determine the amount of time necessary for immature C.mimosae to become functional workers, we reared pupae and large larvae in the lab. Fifteen workers and 8 brood were placed in small cups (N = 7 for pupae and larvae) and fed sugar water and a tuna protein source ad libitum. Brood of each category were randomly selected from the standing stock of pupae or larvae found in a domatia. This helped establish a range in times to metamorphosis. Individuals were checked every 2 days to see if any larvae had pupated or workers had emerged. To determine if pupae are able to eclose with no assistance from workers, we followed the same design (N = 4 cups with 8 pupae) as above but did not include any workers in cups with pupae and removed any new workers as they emerged.

Results

Of the 55% of pupae and 30% of large larvae paired with workers that metamorphosed, it took an average of X +SE = 8.7 +0.75 and 5.29 +0.72 days respectively. Pupae that were isolated from workers eclosed at a higher rate 93%, taking on average X +SE = 12.6 +1.51 days.